

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1-20 (canceled)

Claims 21-32 (canceled)

Claims 33-44 (erroneously numbered 36-47) (canceled)

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Claim 45 (new): A mechanism to be applied to an exterior surface of a substantially cylindrical structure for reduction of the effects of vortex-induced vibration (VIV) in the structure when the structure is submerged in flowing fluid, the mechanism comprising:

a plurality of columnar segments disposed around the exterior surface of the structure in a vertically stacked arrangement, each of the segments having a vertical surface discontinuity oriented substantially parallel to the axis of the structure, the segments being arranged with respect to each other so that the surface discontinuity of each segment is circumferentially displaced from the surface discontinuity of an adjacent segment, whereby the surface discontinuities of the plurality of segments define a discontinuous, stepwise, approximately helical pattern along the length of the structure.

Claim 46 (new): The mechanism of claim 45, wherein the surface discontinuity is a notch.

Claim 47 (new): The mechanism of claim 45, wherein the surface discontinuity is a projection.

Claim 48 (new): The mechanism of claim 45, wherein the columnar segments are substantially cylindrical.

Claim 49 (new): A mechanism to be applied to an exterior surface of a substantially cylindrical structure for reduction of the effects of vortex-induced vibration (VIV) in the structure when the structure is submerged in flowing fluid, the mechanism comprising:

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a plurality of columnar segments disposed around the exterior surface of the structure in a vertically stacked arrangement, each of the segments having a non-circular cross-sectional shape, each of the segments being angularly offset from an adjacent segment, whereby the plurality of segments forms a twisted, spiral shape.

Claim 50 (new): A mechanism to be applied to an exterior surface of a substantially cylindrical structure for reduction of the effects of vortex-induced vibration (VIV) in the structure when the structure is submerged in flowing fluid, the mechanism comprising:

a plurality of columnar segments disposed around the exterior surface of the structure in a vertically stacked arrangement, each of the segments having a non-circular cross-sectional shape, each of the segments being angularly offset from an adjacent segment, whereby the plurality of segments forms a discontinuous, stepped exterior shape.
